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UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

Project	Date	Author

TITLE

FOREST INSECT SURVEYS

LASSEN VOLCANIC NATIONAL PARK

SEASON OF 1942

by

Philip C. Johnson
Berkeley, California
May 5, 1943

SUBJECT—

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Forest Insect Laboratory
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FOREST INSECT SURVEYS

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SEASON OF 1942

Approved by:

F. P. Keen

Senior Entomologist, in Charge

Submitted by:

Associate Entomologist

Forest Insect Surveys
LASSEN VOLCANIC NATIONAL PARK
Season of 1942

A reconnaissance of current forest insect conditions was made of the timbered portions of Lassen Volcanic National Park on October 6 and 7, 1942. During the afternoon of October 6, the eastern portion of the park was viewed from the summit of Mt. Harkness and a general reconnaissance made using the road system in this part of the park. On October 8 arrangements were made at Mineral with Ranger Marlin K. Potts, in the absence of Superintendent Lloyd, to view the western portions of the park in company with District Ranger John Rutter of Manzanita Lake. His knowledge of past insect activities and his assistance in helping locate current infestations was extremely helpful in appraising the over-all insect problems in the park.

Current Insect Damage.

Damage to park timber from all forms of insects was practically non-existent in 1942, with one or two minor exceptions. No defoliators or other unusual forms of forest insects were noted, leaving a few scattered bark beetle infestations as the only source of insect damage in the park. There was no beetle damage to speak of in the stands of white and red fir (Abies spp.), mountain hemlock, or western white, whitebark, ponderosa or lodgepole pines. An unusual and very noticeable dying of the terminal portions of the lateral twigs of red fir was seen along the Loop Highway between Summit Lake campground and Hat Creek, but the causal agent was found to be mistletoe -- later confirmed by Dr. Willis W. Wagener of the Bureau of Plant Industry. Special attention was given to camp-ground areas and administrative centers, but no new insect damage of importance was noted in the trees surrounding them.

The only infestations found anywhere were those caused by the Jeffrey pine beetle, Dendroctonus jeffreyi Hopk. Slight damage was caused by this beetle during 1942 in the Jeffrey pine stands in the vicinity of Butte Lake. The infestation here averaged about four trees per square mile where the timber was heaviest. Somewhat heavier damage was pointed out by Ranger Rutter in the Jeffrey pine forest bordering the Loop Highway in the Lost Creek drainage between Emigrant and Noble Passes. In this area there were perhaps 20 to 30 mature trees which had been attacked and killed in 1942, some of which were believed to be outside but adjacent to the park boundary.

Insect Control Recommendations.

Current insect infestations are so low that maintenance control work seems to be all that is necessary during 1943, and this only in the high-use areas. The few infested trees which may occur in these places should be removed from the stand soon after they are killed and the insect broods in them destroyed. The areas where this treatment may be expected more frequently are those where Jeffrey pine forms a large part of the forest cover -- Manzanita Lake, Butte Lake and along Lost Creek. Pine beetle surveys made in the national forests in northeastern California late in 1942 showed that the Jeffrey pine beetle is currently the most important forest insect in terms of its damage and that it appears to be continuing its aggressive role while the damage from all other forms of forest insects seems to have definitely subsided.

More intensive control measures could very well be employed in the Lost Creek drainage before June 15, 1943, or before the overwintering Jeffrey pine beetle broods in this area emerge. The infestation here has already reached the maximum point tolerated by intensively used recreational areas and if this brood is allowed to emerge in numbers, further damage may be expected in 1943.

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